

# **Antibiotic Resistance Solutions Initiative**

CDC's Detect Network of AR Regional Labs

## **FY16** → Comprehensive Lab Coverage for testing 17 Antibiotic Resistant Pathogens

The regional labs will have cutting-edge technology that can provide more information on where detected resistance came from and how it is related to other types of resistance across the country.

Through the regional lab network, CDC and public health will be able to accumulate real-time, actionable information about dangerous antibiotic resistant threats.



Equipped with CDC's gold-standard capacity to identify any type of resistance, members of the

AR Lab Network will serve as a national resource to support hospital labs.





If the hospital lab results show drug-resistant bacteria, such as Carbapenem-resistant Enterobacteriaceae (CRE), known as

then the samples from the patient will be sent to a lab in the AR Lab Network for confirmation and characterization.

Hospital labs have the ability to identify most but not all types of antibiotic resistance, especially novel forms of resistance.



CDC and regional AR labs send samples and data to the

### **AR Isolate Bank**

for use by industry and academics.



## Pharmaceutical companies will use samples to test new antibiotic agents.

**Biotech** and diagnostic companies will use samples to design next-generation clinical tests.

**Researchers** will use samples to study emerging resistance and investigate spread of AR pathogens.

Using samples from the AR Isolate Bank, industry and academic institutions will team up with CDC to help patients receive earlier diagnosis and effective treatment.

